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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,488	12/19/2003	Marcus David Shelby	80081	2427
40850	7590	12/15/2005		
ERIC D. MIDDLEMAS EASTMAN CHEMICAL COMPANY P. O. BOX 511 KINGSPORT, TN 37662-5075			EXAMINER SASTRI, SATYA B	
			ART UNIT 1713	PAPER NUMBER

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/743,488	SHELBY ET AL.	
	Examiner	Art Unit	
	Satya B. Sastri	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/10/04, 6/16/05, 3/19/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application filed on December 19, 2003. *Claims 1-28* are now pending in the application.

Claim Rejections - 35 USC § 102 and 103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. *Claims 1, 2, 3, 4, 5 and 28* are rejected under 35 U.S.C. 102(b) as anticipated by Masuda et al. (JP56-38367A, English Translation).

Prior art to Masuda et al. concerns adhesives comprising 50-97% by wt. of saturated polyester with a melt index at 140°C in the range of 50-400 g/10min and 50-3% by wt. of a vinyl polymer with a melt index at 190°C in the range of 0.5 to 20 g/10min (page 1, claims). The carboxylic acid component may comprise an aliphatic dicarboxylic acid such as adipic acid, azelaic acid, sebacic acid etc. and an aromatic dicarboxylic acid such as terephthalic acid, isophthalic acid, 2,6-naphthalene dicarboxylic acid (page 4). Furthermore, vinyl polymer may

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ethylene-vinyl acetate copolymers of component such as (page 4, lines 18-20). Tables 1 and 2 disclose polyester Ia, Ic and Id that are aliphatic-aromatic polyesters and IIb as the ethylene-vinyl acetate copolymer. Adhesive composition of working example 4 includes a polymer blend with instantly claimed melt index limitations. Thus, the instant claims are anticipated by the prior art.

5. **Claims 6-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (JP56-38367A, English Translation) in view of Buchanan et al. (US 5,292,783) and Warzelhan et al. (US 6,303,677).

Prior art to Masuda et al. is presented above in paragraph 4 above and is incorporated herein by reference.

The difference between the instant invention and the prior art is that the prior art does not teach or suggest the inclusion of a biodegradable additive in the composition.

Secondary reference to Buchanan discloses blends of aliphatic-aromatic copolyesters with cellulose esters and other polymeric compounds for use in fibers, molded objects, films etc. The prior art also recognizes the functional equivalence of cellulose esters and cellulose in various compositions (column 3, lines 33-37). More specifically, the blends may contain 4-97% of cellulose ester, 2-95% of aliphatic –aromatic polyester and 1-94% of polymeric compound (column 6, lines 1-20). Typical polymeric compounds for ternary blends include ethylene-vinyl acetate copolymers (column 12, lines 63-68 and column 11, lines 1-15). Additionally, the compositions may include additives including calcium carbonate, silica, titanium dioxide etc. (column 14, lines 5-15). Furthermore, working examples in table XI (# 130, 131) include ethylene-vinyl acetate copolymer with vinyl acetate content of 40%. The inclusion of various

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additives in random aliphatic-aromatic copolyesters enhances properties such as water vapor transmission rates and biodegradability (column 1, lines 219-22, column 5, lines 6-16, column 15, lines 22-27). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include biodegradable additives in the compositions disclosed by Masuda et al. and thereby obtain the instant invention.

Prior art Warzelhan et al. teaches that biodegradable polyester compositions comprising aliphatic and aromatic acid components may be useful in adhesives, biodegradable moldings etc. (abstract). Thus, the teachings of Masuda and Buchanan et al. are combinable.

6-9 103

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112.

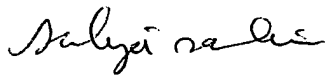
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

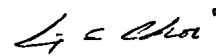
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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SATYA SASTRI

December 9, 2005



LING-SUI CHOI
PRIMARY EXAMINER